Rhode Island Pollutant Discharge Elimination System General Permit for Discharges Associated with the Treatment of Groundwater Contaminated by #2 Fuel Oil



Expiration Date: June 1, 2009

Valid only in accordance with part I.A.4

Rhode Island Department of Environmental Management
Office of Water Resources
Permitting Section
RIPDES Program

Rhode Island Pollutant Discharge Elimination System General Permit for

Discharges Associated with the Treatment of Groundwater Contaminated by #2 Fuel Oil

Part I: Specific Permit Conditions

A. General Coverage Under this Permit

- 1. <u>Permit Area</u>. This permit applies to all areas of the State of Rhode Island.
- 2. <u>Eligibility</u>. Except discharges identified in Part I.A.3, this permit may cover all new and existing discharges to Waters of the State associated with the treatment of groundwater contaminated with gasoline and/or #2 fuel oil.
- 3. <u>Limitations of Coverage</u>. The following discharges associated with the treatment of contaminated groundwater may not be authorized by this permit:
 - a. Discharges associated with the treatment of groundwater that has a reasonable potential to be contaminated with sources other than gasoline and/or #2 fuel oil.
 - b. Discharges associated with the treatment of groundwater contaminated with gasoline and/or #2 fuel oil that may adversely affect a listed, or a proposed to be listed, endangered or threatened species or its critical habitat.
 - c. Discharges associated with the treatment of groundwater contaminated with gasoline and/or #2 fuel oil that may cause or contribute to a water quality violation.
 - d. Discharges associated with the treatment of groundwater contaminated with gasoline and/or #2 fuel oil to the terminal reservoir or any other waters of a public drinking water supply.
 - e. Discharges to other Class A or SA waters where the applicant failed to demonstrate to the satisfaction of the Director, that no reasonable alternative exists.
- 4. Authorization. To be authorized to discharge under this general permit, owners and operators of discharges associated with the treatment of groundwater contaminated with gasoline and/or #2 fuel oil shall submit to the Director a standardized Notice of Intent (NOI) form in accordance with Part I.D. of this permit. Upon review of the NOI, the Director may deny coverage under this general permit at any time and require submittal of an application for an individual permit. Authorization to discharge under this general permit shall only be effective upon the owner(s) receipt of an authorization page signed and certified by the Director or the Director's designee. The authorization page may include special conditions, as necessary to protect waters of the state. For the purposes of this permit, the permittee shall be defined as the owner(s) of the site requiring the remediation and/or dewatering.
 - 1. Deadlines for Requesting Authorization.
 - a. Discharges that were authorized under the 1999 General Permit for Discharges Associated with the Treatment of Groundwater Contaminated by #2 Fuel Oil which are expected to continue discharging after the effective date of this permit, must submit an NOI with the information identified in Parts I.D.1 a, b, c, h, & i within thirty (30) days of the effective date of this permit.
 - b. For discharges associated with the treatment of groundwater contaminated by #2 fuel oil which commence after the effective date of this permit, an NOI must be submitted, in accordance with Part I.D. of this permit, ninety (90) days prior to the commencement of such discharge.

- 5. <u>Termination of Coverage</u>. Owners and/or operators shall notify the Office of Water Resources Permitting Section in writing upon completion of the remediation and/or dewatering operation. Until that point, the terms and conditions of this permit shall remain in full effect. At a minimum, the following information is required to terminate coverage under this permit:
 - a. Owner(s) name, mailing address, and telephone number;
 - b. Operator(s) name, mailing address, and telephone number;
 - c. The RIPDES Permit number;
 - d. Certification that the discharge from the groundwater treatment system has been terminated; and
 - e. Documentation from the Office of Waste Management that the shut down has been approved.

B. Effluent Limitations and Monitoring Requirements

1. Class I: Discharges to Class A receiving waters with a dilution factor less than ten (10). During the period beginning on the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

| Effluent Characteristic | <u>Discharge Limitations</u> Concentration - Specify Units | | Monitoring Requirement | |
|--------------------------------|---|-------------------------|-----------------------------------|-----------------------|
| | Average <u>Monthly</u> | Maximum <u>Daily</u> | Measurement <u>Frequency</u> 1 | Sample <u>Type</u> |
| Flow | GPM | xxx GPM | Continuous ² | Totalizer |
| Benzene | 5.0 ug/l | 5.0 ug/l | 2/Month | Grab |
| Toluene | 14 ug/l | ug/l | 2/Month | Grab |
| Ethyl-benzene | 36 ug/l | ug/l | 2/Month | Grab |
| Total Xylenes | 3.0 ug/l | ug/l | 2/Month | Grab |
| Total BTEX | ug/l | 100 ug/l | 2/Month | Grab |
| MTBE | ug/l | ug/l | 2/Month | Grab |
| Total Iron | mg/l | mg/l | 2/Month | Grab |
| Benzo (a) Anthracene | ug/l | 0.028 ug/l ³ | 2/Month | Grab |
| Benzo (a) Pyrene | ug/l | 0.028 ug/l ³ | 2/Month | Grab |
| Benzo (b) Fluoranthene | ug/l | 0.028 ug/l ³ | 2/Month | Grab |
| Benzo (k) Fluoranthene | ug/l | 0.028 ug/l ³ | 2/Month | Grab |
| Chrysene | ug/l | 0.028 ug/l ³ | 2/Month | Grab |
| Dibenzo (a,h) Anthracene | ug/l | 0.028 ug/l ³ | 2/Month | Grab |
| Indeno (1,2,3-cd) Pyrene | ug/l | 0.028 ug/l ³ | 2/Month | Grab |
| Acenaphthene | ug/l | 1.9 ug/l ³ | 2/Month | Grab |
| Acenaphthylene | ug/l | | 2/Month | Grab |
| Anthracene | ug/l | | 2/Month | Grab |
| Benzo (ghi) Perylene | ug/l | | 2/Month | Grab |
| Fluoranthene | ug/l | | 2/Month | Grab |
| Fluorene | ug/l | | 2/Month | Grab |
| Naphthalene | ug/l | | 2/Month | Grab |
| Phenanthrene | ug/l | | 2/Month | Grab |
| Pyrene | ug/l | | 2/Month | Grab |
| Total Petroleum Hydrocarbon | ug/l | 1 mg/l | 2/Month | Grab |

Description of footnotes and symbols applicable to all monitoring classes:

¹In accordance with Part I.A.4., the Department reserves the right to increase monitoring frequency based on factors including, but not limited to, quality of influent data and duration of project.

²Monitor flow and submit a flow log with the monitoring results. The flow log shall include the rate and duration of flow including the time(s) of day when flow commences and ceases. At a minimum, the flow must be reported each time a sample is collected.

³The limit at which compliance/noncompliance determinations will be based is the Minimum Level (ML). For this permit the ML for PAH's has been defined as 10 ug/l and this value may be reduced by permit modification as more sensitive test methods are approved by EPA and the State.

---Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxxSignifies a parameter which will be limited based upon the design plans and specifications for each project.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the effluent of a groundwater treatment system. The two (2) grab samples taken per month shall be separated by a minimum of ten (10) days.

2. Class II: Discharges to Class B receiving waters with a dilution factor less than ten (10). During the period beginning on the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

| Effluent Characteristic | <u>Discharge Limitations</u> Concentration - Specify Units | | Monitoring Requirement | |
|--------------------------------|---|-------------------------|-----------------------------------|-----------------------|
| | Average <u>Monthly</u> | Maximum <u>Daily</u> | Measurement <u>Frequency</u> 1 | Sample <u>Type</u> |
| Flow | GPM | xxx GPM | Continuous ² | Totalizer |
| Benzene | 5.0 ug/l | 5.0 ug/l | 2/Month | Grab |
| Toluene | 14 ug/l | ug/I | 2/Month | Grab |
| Ethyl-benzene | 36 ug/l | ug/l | 2/Month | Grab |
| Total Xylenes | 3.0 ug/l | ug/l | 2/Month | Grab |
| Total BTEX | ug/l | 100 ug/l | 2/Month | Grab |
| MTBE | ug/l | ug/l | 2/Month | Grab |
| Total Iron | mg/l | mg/l | 2/Month | Grab |
| Benzo (a) Anthracene | ug/l | 0.31 ug/l ³ | 2/Month | Grab |
| Benzo (a) Pyrene | ug/l | 0.31 ug/l ³ | 2/Month | Grab |
| Benzo (b) Fluoranthene | ug/l | 0.31 ug/l ³ | 2/Month | Grab |
| Benzo (k) Fluoranthene | ug/l | 0.31 ug/l ³ | 2/Month | Grab |
| Chrysene | ug/l | 0.31 ug/l ³ | 2/Month | Grab |
| Dibenzo (a,h) Anthracene | ug/l | 0.31 ug/l ³ | 2/Month | Grab |
| Indeno (1,2,3-cd) Pyrene | ug/l | 0.31 ug/l ³ | 2/Month | Grab |
| Acenaphthene | ug/l | 1.9 ug/l ³ | 2/Month | Grab |
| Acenaphthylene | ug/l | | 2/Month | Grab |
| Anthracene | ug/l | | 2/Month | Grab |
| Benzo (ghi) Perylene | ug/l | | 2/Month | Grab |
| Fluoranthene | ug/l | | 2/Month | Grab |
| Fluorene | ug/l | | 2/Month | Grab |
| Naphthalene | ug/l | | 2/Month | Grab |
| Phenanthrene | ug/l | | 2/Month | Grab |
| Pyrene | ug/l | | 2/Month | Grab |
| Total Petroleum Hydrocarbon | ug/l | 1 mg/l | 2/Month | Grab |

3. Class III: Discharges to Class A receiving waters with a dilution factor greater than ten (10). During the period beginning on the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

| Effluent Characteristic | <u>Discharge Limitations</u> Concentration - Specify Units | | Monitoring Requirement | |
|--------------------------------|---|-------------------------|--|-----------------------|
| | Average <u>Monthly</u> | Maximum <u>Daily</u> | Measurement <u>Frequency</u> ¹ | Sample <u>Type</u> |
| Flow | GPM | xxx GPM | Continuous ² | Totalizer |
| Benzene | 5.0 ug/l | 5.0 ug/l | 2/Month | Grab |
| Toluene | 14 ug/l | ug/l | 2/Month | Grab |
| Ethyl-benzene | 36 ug/l | ug/l | 2/Month | Grab |
| Total Xylenes | 30.0 ug/l | ug/l | 2/Month | Grab |
| Total BTEX | 100 ug/l | 100 ug/l | 2/Month | Grab |
| MTBE | ug/l | ug/l | 2/Month | Grab |
| Total Iron | mg/l | mg/l | 2/Month | Grab |
| Benzo (a) Anthracene | ug/l | 0.28 ug/l ³ | 2/Month | Grab |
| Benzo (a) Pyrene | ug/l | 0.28 ug/l ³ | 2/Month | Grab |
| Benzo (b) Fluoranthene | ug/l | 0.28 ug/l ³ | 2/Month | Grab |
| Benzo (k) Fluoranthene | ug/l | 0.28 ug/l ³ | 2/Month | Grab |
| Chrysene | ug/l | 0.28 ug/l ³ | 2/Month | Grab |
| Dibenzo (a,h) Anthracene | ug/l | 0.28 ug/l ³ | 2/Month | Grab |
| Indeno (1,2,3-cd) Pyrene | ug/l | 0.28 ug/l ³ | 2/Month | Grab |
| Acenaphthene | ug/l | 19 ug/l | 2/Month | Grab |
| Acenaphthylene | ug/l | | 2/Month | Grab |
| Anthracene | ug/l | | 2/Month | Grab |
| Benzo (ghi) Perylene | ug/l | | 2/Month | Grab |
| Fluoranthene | ug/l | | 2/Month | Grab |
| Fluorene | ug/l | | 2/Month | Grab |
| Naphthalene | ug/l | | 2/Month | Grab |
| Phenanthrene | ug/l | | 2/Month | Grab |
| Pyrene | ug/l | | 2/Month | Grab |
| Total Petroleum Hydrocarbon | ug/l | 1 mg/l | 2/Month | Grab |

4. Class IV: Discharges to Class B receiving waters with a dilution factor greater than ten (10). During the period beginning on the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

| Effluent Characteristic | <u>Discharge Limitations</u> Concentration - Specify Units | | Monitoring Requirement | |
|--------------------------------|---|-------------------------|--|-----------------------|
| | Average <u>Monthly</u> | Maximum <u>Daily</u> | Measurement <u>Frequency</u> ¹ | Sample <u>Type</u> |
| Flow | GPM | xxx GPM | Continuous ² | Totalizer |
| Benzene | 5.0 ug/l | 5.0 ug/l | 2/Month | Grab |
| Toluene | 14 ug/l | ug/l | 2/Month | Grab |
| Ethyl-benzene | 36 ug/l | ug/l | 2/Month | Grab |
| Total Xylenes | 30.0 ug/l | ug/l | 2/Month | Grab |
| Total BTEX | 100 ug/l | 100 ug/l | 2/Month | Grab |
| MTBE | ug/l | ug/l | 2/Month | Grab |
| Total Iron | mg/l | mg/l | 2/Month | Grab |
| Benzo (a) Anthracene | ug/l | 3.1 ug/l ³ | 2/Month | Grab |
| Benzo (a) Pyrene | ug/l | 3.1 ug/l ³ | 2/Month | Grab |
| Benzo (b) Fluoranthene | ug/l | 3.1 ug/l ³ | 2/Month | Grab |
| Benzo (k) Fluoranthene | ug/l | 3.1 ug/l ³ | 2/Month | Grab |
| Chrysene | ug/l | 3.1 ug/l ³ | 2/Month | Grab |
| Dibenzo (a,h) Anthracene | ug/l | 3.1 ug/l ³ | 2/Month | Grab |
| Indeno (1,2,3-cd) Pyrene | ug/l | 3.1 ug/l ³ | 2/Month | Grab |
| Acenaphthene | ug/l | 19 ug/l | 2/Month | Grab |
| Acenaphthylene | ug/l | | 2/Month | Grab |
| Anthracene | ug/l | | 2/Month | Grab |
| Benzo (ghi) Perylene | ug/l | | 2/Month | Grab |
| Fluoranthene | ug/l | | 2/Month | Grab |
| Fluorene | ug/l | | 2/Month | Grab |
| Naphthalene | ug/l | | 2/Month | Grab |
| Phenanthrene | ug/l | | 2/Month | Grab |
| Pyrene | ug/l | | 2/Month | Grab |
| Total Petroleum Hydrocarbon | ug/l | 1 mg/l | 2/Month | Grab |

5. Class V: Discharges to Class SA receiving waters. During the period beginning on the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

| Effluent Characteristic | <u>Discharge Limitations</u> Concentration - Specify Units | | Monitoring Requirement | |
|--------------------------------|---|-------------------------|-----------------------------------|-----------------------|
| | Average <u>Monthly</u> | Maximum <u>Daily</u> | Measurement <u>Frequency</u> 1 | Sample <u>Type</u> |
| Flow | GPM | xxx GPM | Continuous ² | Totalizer |
| Benzene | 5.0 ug/l | 5.0 ug/l | 2/Month | Grab |
| Toluene | ug/l | ug/l | 2/Month | Grab |
| Ethyl-benzene | ug/l | ug/l | 2/Month | Grab |
| Total Xylenes | ug/l | ug/l | 2/Month | Grab |
| Total BTEX | 100 ug/l | 100 ug/l | 2/Month | Grab |
| MTBE | ug/l | ug/l | 2/Month | Grab |
| Total Iron | mg/l | mg/l | 2/Month | Grab |
| Benzo (a) Anthracene | ug/l | 0.028 ug/l ³ | 2/Month | Grab |
| Benzo (a) Pyrene | ug/l | 0.028 ug/l ³ | 2/Month | Grab |
| Benzo (b) Fluoranthene | ug/l | 0.028 ug/l ³ | 2/Month | Grab |
| Benzo (k) Fluoranthene | ug/l | 0.028 ug/l ³ | 2/Month | Grab |
| Chrysene | ug/l | 0.028 ug/l ³ | 2/Month | Grab |
| Dibenzo (a,h) Anthracene | ug/l | 0.028 ug/l ³ | 2/Month | Grab |
| Indeno (1,2,3-cd) Pyrene | ug/l | 0.028 ug/l ³ | 2/Month | Grab |
| Acenaphthene | ug/l | 1.9 ug/l ³ | 2/Month | Grab |
| Acenaphthylene | ug/l | | 2/Month | Grab |
| Anthracene | ug/l | | 2/Month | Grab |
| Benzo (ghi) Perylene | ug/l | | 2/Month | Grab |
| Fluoranthene | ug/l | | 2/Month | Grab |
| Fluorene | ug/l | | 2/Month | Grab |
| Naphthalene | ug/l | | 2/Month | Grab |
| Phenanthrene | ug/l | | 2/Month | Grab |
| Pyrene | ug/l | | 2/Month | Grab |
| Total Petroleum Hydrocarbon | ug/l | 1 mg/l | 2/Month | Grab |

6. Class VI: Discharges to Class SB receiving waters. During the period beginning on the date of authorization to discharge and lasting until either the expiration of this general permit or termination of coverage, permittee(s) are authorized to discharge from an approved groundwater treatment system. Such discharges shall be limited and monitored by the permittee as specified below:

| Effluent Characteristic | <u>Discharge Limitations</u> Concentration - Specify Units | | Monitoring Requirement | |
|--------------------------------|---|-------------------------|--|-----------------------|
| | Average <u>Monthly</u> | Maximum <u>Daily</u> | Measurement <u>Frequency</u> ¹ | Sample <u>Type</u> |
| Flow | GPM | xxx GPM | Continuous ² | Totalizer |
| Benzene | 5.0 ug/l | 5.0 ug/l | 2/Month | Grab |
| Toluene | ug/l | ug/l | 2/Month | Grab |
| Ethyl-benzene | ug/l | ug/l | 2/Month | Grab |
| Total Xylenes | ug/l | ug/l | 2/Month | Grab |
| Total BTEX | 100 ug/l | 100 ug/l | 2/Month | Grab |
| MTBE | ug/l | ug/l | 2/Month | Grab |
| Total Iron | mg/l | mg/l | 2/Month | Grab |
| Benzo (a) Anthracene | ug/l | 0.31 ug/l ³ | 2/Month | Grab |
| Benzo (a) Pyrene | ug/l | 0.31 ug/l ³ | 2/Month | Grab |
| Benzo (b) Fluoranthene | ug/l | 0.31 ug/l ³ | 2/Month | Grab |
| Benzo (k) Fluoranthene | ug/l | 0.31 ug/l ³ | 2/Month | Grab |
| Chrysene | ug/l | 0.31 ug/l ³ | 2/Month | Grab |
| Dibenzo (a,h) Anthracene | ug/l | 0.31 ug/l ³ | 2/Month | Grab |
| Indeno (1,2,3-cd) Pyrene | ug/l | 0.31 ug/l ³ | 2/Month | Grab |
| Acenaphthene | ug/l | 1.9 ug/l ³ | 2/Month | Grab |
| Acenaphthylene | ug/l | | 2/Month | Grab |
| Anthracene | ug/l | | 2/Month | Grab |
| Benzo (ghi) Perylene | ug/l | | 2/Month | Grab |
| Fluoranthene | ug/l | | 2/Month | Grab |
| Fluorene | ug/l | | 2/Month | Grab |
| Naphthalene | ug/l | | 2/Month | Grab |
| Phenanthrene | ug/l | | 2/Month | Grab |
| Pyrene | ug/l | | 2/Month | Grab |
| Total Petroleum Hydrocarbon | ug/l | 1 mg/l | 2/Month | Grab |

C. Permit Conditions

- 1. The permittee shall treat all groundwater pumped at the site using the treatment system described in the Notice of Intent. The permittee may not modify the treatment system without prior written approval from the Office of Water Resources.
- 2. Treatment systems shall be equipped with liquid level and pressure sensors, alarms, automatic shut-offs and other fail-safe features, as appropriate to ensure the integrity of the treatment system. If the system includes granular activated carbon, the theoretical time to carbon breakthrough of the entire system shall be greater than either ten (10) days beyond the anticipated period of the discharge or sixty (60) days, whichever is less.
- 3. The Department reserves the right to require monitoring of influent iron concentrations and may require iron pretreatment if iron fouling reduces the effectiveness of treatment equipment.
- 4. The treatment system shall be inspected at a minimum of twice per month to assure the system is operating efficiently. As a result of these or any other inspections, appropriate action shall be taken, as soon as practicable, to resolve any problems discovered during an inspection. Records documenting inspections and any actions taken (i.e. changing carbon) shall be retained and made available upon request to the Office of Water Resources and any other Office, as appropriate. If monitoring requirements are reduced per part C.7., then inspection requirements shall be reduced consistently.
- 5. The permittee shall at all times properly operate and maintain the groundwater recovery/treatment system. Mechanical failure or breakthrough of the treatment system (exceedance of any permit limits) shall be reported to the Office of Water Resources and the Office of Waste Management within one (1) business day of the date the analysis is conducted.
- 6. a. The discharge shall not cause visible discoloration of the receiving waters.
 - b. The discharge shall not cause or contribute to any stream bank erosion and/or cause or contribute to any soil erosion and sedimentation.
 - c. The effluent shall contain neither a visible oil sheen, foam, nor floating solids at any time.
- 7. The permittee may request a reduction in the monitoring frequency to once per month following six (6) consecutive months of operation, showing effluent results consistently below the permit limitations and acceptable treatment system performance. The performance of the treatment system shall be evaluated based on all available system performance data, including such information as: flow, operation and maintenance activities, and all available influent and effluent data. At a minimum, influent data shall be collected once per month during the time period specified above. The Office of Water Resources shall grant, grant with conditions, deny, or at a minimum, notify the permittee of the status of the permittee's request within forty five (45) days of receipt of said request. If the permittee's request is denied, the factual and/or legal basis for such denial shall be communicated in writing to the permittee.
- 8. This General Permit shall in no way be construed to exempt the applicant from any additional requirements of any Federal, State, or local agency.

1. Contents of Notice of Intent (NOI)

- a. The following information on the owner(s) of the site shall be provided: name, mailing address, and telephone number.
- b. The following information on the operator(s) of the site activity (i.e., remedial activity, dewatering) shall be provided: name, mailing address, and telephone number.
- A project description including: brief history of the site, source of contamination, and a
 brief description of proposed remedial and/or dewatering activity creating the discharge.
 If any of this information is contained in a Remedial Action Plan and/or Corrective Action
 Plan, then it may be incorporated as part of the NOI by reference.
- d. A site plan showing an approximate extent of contamination, location of monitoring and recovery wells, discharge point, and receiving waters.
- e. An 8.5" by 11" photocopy of a USGS 1:24,000 topographic map depicting site location.
- f. A complete description of the proposed treatment system including: a flow-schematic depicting all major control points (i.e., alarms, sensors, valves) and treatment units; design calculations on the expected treatment performance (i.e., removal efficiency, carbon consumption calculations); a description of the alarm and automated control system, including all indicators (visual, audible and telemetered) such as system malfunction, pump failure, loss of power, high and low liquid levels or pressures, etc., and the location of all alarm sensors and their respective set points; and manufacturers' specifications on major components of the treatment system. This analysis shall demonstrate compliance with all applicable effluent limitations. Please provide a basis for all design calculations and properly reference all design assumptions in order for calculations to be easily replicated. Also, include a discussion on the need for iron treatment to address iron scaling and/or iron bacteria build-up. If information has already been submitted to another DEM Office, it does not need to be resubmitted. However, the applicant should provide the name of the office where the report was submitted, the name of the point of contact, and the report title or case number.
- g. All available analytical data on impacted groundwater and/or soils shall be provided. This data shall be adequate to determine the design influent concentrations of the treatment system. If this data has already been submitted to another DEM Office, it does not need to be resubmitted. However, the applicant should provide the name of the office where the data was submitted, the name of the point of contact, and the report title or case number.
- h. The name and classification of the receiving water(s) and if the discharge is through a separate storm sewer, the name of the owner of the separate storm sewer system, (see the RI Water Quality Regulations). In accordance with Rule 9.2.d of the Water Quality Regulations, new discharges from groundwater remediation projects to Class A or SA waters must demonstrate to the satisfaction of the Director that no reasonable alternative exists (e.g. documentation that groundwater reinjection or discharge to a sanitary sewer system is not feasible). Please note that projects may need approval from the owner of the separate storm sewer prior to the commencement of the discharge.
- i. **For discharges to freshwater only**, calculate the approximate instream dilution factor based on an aquatic low-flow analysis. (See the NOI instructions to determine how to calculate an instream dilution factor.)
- j. Additional information may be required by the Department to be included as part of the NOI, if the Director determines that such information is reasonably necessary to determine whether or not to authorize the discharge under this permit.

Please note that Rule 14 B of the Rhode Water Quality Regulations states that engineering plans and specifications shall be signed and certified by a professional engineer registered in the State

of Rhode Island. Therefore, the plans and specifications on all groundwater treatment systems shall be signed and certified by a professional engineer registered in the State of Rhode Island.

2. Where to Submit NOI: An NOI signed and certified by the <u>owner and operator</u>, in accordance with RIPDES Rule 12, shall be submitted to:

Office of Water Resources
RIPDES Program
Rhode Island Department of Environmental Management
235 Promenade Street
Providence, Rhode Island 02908

3. <u>Deficient NOI</u>: If any portion of the NOI does not meet one or more of the minimum requirements of this part, then the applicant will receive notification of the deficiency(ies). It is the responsibility of the applicant to make all required changes and resubmit the NOI. The review period will recommence upon the submittal of the revised NOI. Failure or refusal to submit the required information shall result in denial of authorization to discharge under this general permit.

E. METHOD DETECTION LIMIT

The permittee shall assure that all testing required by this permit, is performed in conformance with the method detection limits listed below. In accordance with 40 CFR Part 136, EPA approved analysis techniques, quality assurance procedures and quality control procedures shall be followed for all reports required to be submitted under the RIPDES program. These procedures are described in "Methods for the Determination of Metals in Environmental Samples" (EPA/600/4-91/010) and "Methods for Chemical Analysis of Water and Wastes" (EPA/600/4-79/020).

If after conducting the complete Method of Standard Additions analysis, the laboratory is unable to determine a valid result, the laboratory shall report "could not be analyzed". Documentation supporting this claim shall be submitted along with the monitoring report. If valid analytical results are repeatedly unobtainable, DEM may require that the permittee determine a method detection limit (MDL) for their effluent or sludge as outlined in 40 CFR Part 136, Appendix B.

Therefore, all sample results shall be reported as; an actual value, "could not be analyzed", less than the reagent water MDL, or less than an effluent or sludge specific MDL. The effluent or sludge specific MDL must be calculated using the methods outlined in 40 CFR Part 136, Appendix B. Samples which have been diluted to ensure that the sample concentration will be within the linear dynamic range shall not be diluted to the extent that the analyte is not detected. If this should occur, the analysis shall be repeated using a lower degree of dilution.

When calculating sample averages for reporting on discharge monitoring reports (DMRs):

- 1. "could not be analyzed" data shall be excluded, and shall not be considered as failure to comply with the permit sampling requirements;
- 2. results reported as less than the MDL shall be included as values equal to the MDL, and the average shall be reported as "less than" the calculated value.

For compliance purposes, DEM will replace all data reported as less than the MDL with zeroes, provided that DEM determines that all appropriate EPA-approved methods were followed. If the recalculated average exceeds the permit limitation, it will be considered a violation.

Volatiles

| <u>Parameter</u> | EPA Method | MDL (ug/l) |
|--------------------------|------------|------------|
| Total Xylene | 624 | 3.0 |
| Ethyl-benzene | 624 | 1.0 |
| Benzene | 624 | 1.0 |
| Toluene | 624 | 1.0 |
| MTBE | 524.2 | 1.0 |
| Benzo (a) Anthracene | 625 | 2.0 |
| Benzo (a) Pyrene | 625 | 2.0 |
| Benzo (b) Fluoranthene | 625 | 1.0 |
| Benzo (k) Fluoranthene | 625 | 1.0 |
| Chrysene | 625 | 1.0 |
| Dibenzo (a,h) Anthracene | 625 | 2.0 |
| Indeno (1,2,3-cd) Pyrene | 625 | 2.0 |
| Acenaphthene | 625 | 1.0 |
| Acenaphthylene | 625 | 1.0 |
| Anthracene | 625 | 1.0 |
| Benzo (ghi) Perylene | 625 | 2.0 |
| Fluoranthene | 625 | 1.0 |
| Fluorene | 625 | 1.0 |
| Naphthalene | 625 | 1.0 |
| Phenanthrene | 625 | 1.0 |
| Pyrene | 625 | 1.0 |
| Iron, Total | 200.7 | 0.5 |

NOTE:

Other EPA-approved test methods listed in 40 CFR 136 may be substituted, provided the above-referenced MDLs are attained.

Unless otherwise noted, the MDLs have been determined in reagent water by the Rhode Island Department of Health, Division of Laboratories. The MDL for a given analyte may vary with the type of sample. MDLs, which are determined in reagent water, may be lower than those determined in wastewater due to fewer matrix interferences. Wastewater is variable in composition and may, therefore, contain substances (interferents) that could affect MDLs for some analytes of interest. Variability in instrument performance can also lead to inconsistencies in determinations of MDLs.

For Method 624, the laboratory must be on an ongoing basis, spike at least 5% of the samples from each sample site being monitored. For laboratories analyzing 1 to 20 samples per month, at least one spiked sample per month is required. The spike should be at the discharge permit limit or 1 to 5 times higher than the background concentration determined in Section 8.3.2., whichever concentration would be larger. (40 CFR, Part 136, Appendix B, Method 624, subparts 8.3.1. and 8.3.11.)

F. MONITORING AND REPORTING

1. Reporting

Monitoring results obtained during the previous three (3) months shall be summarized and reported on a Discharge Monitoring Report Form postmarked no later than the 15th day of the month following the completed reporting period.

Standard reporting quarters are: January 1 - March 31, April 1 - June 30, July 1 - September 30, and October 1 - December 31.

Duplicate signed copies of these, and all other reports required herein, shall be submitted to:

Permitting Section
RIPDES Program
Office of Water Resources
Rhode Island Department of Environmental Management
235 Promenade Street
Providence, Rhode Island 02908

Part II: General Conditions of the Permit

- A. <u>Duty to Comply.</u> The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of Chapter 46-12 of the Rhode Island General Laws and the Clean Water Act and is grounds for enforcement action which may include permit termination, revocation and reissuance, modification, or denial of a permit renewal application and the imposition of penalties.
 - The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate this requirement.
 - 2. Section 309 of the CWA provides significant penalties for any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318 or 405 of the CWA or any permit condition or limitation implementing any such sections in a permit issued under Section 402 of the CWA. Any person who violates any condition of this permit is subject to a civil penalty of up to \$25,000 per day of such violation, as well as any other appropriate sanctions provided by Section 309 of the CWA. Section 309(c)(4) of the CWA provides that any person who knowingly makes any false material statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including reports of compliance or noncompliance shall, upon conviction, be punished by a fine of up to \$10,000 or by imprisonment of not more than two years, or by both.
 - 3. Chapter 46-12 of the Rhode Island General Laws provides that any person who violates a permit condition is subject to a civil penalty of not more than \$25,000 per day of such violation. Any person who willfully or negligently violates a permit condition is subject to a criminal penalty of not more than \$25,000 per day of such violation and imprisonment for not more than five (5) years, or both. Any person who knowingly makes any false statement in connection with the permit is subject to a criminal penalty of not more than \$5,000 for each instance of violation or by imprisonment for not more than thirty (30) days, or both.
- B. Continuation of the Expired General Permit. Provided the permittee has re-applied in accordance with paragraph C. below, an expired general permit continues in force and effect until a new general permit is issued. Only those facilities previously authorized to discharge under the expired permit are covered by the continued permit.
- C. <u>Duty to Reapply.</u> If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain coverage under a new permit. The permittee shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Director.
- D. <u>Need to Halt or Reduce Activity Not a Defense</u>. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- E. <u>Duty to Mitigate</u>. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- F. <u>Duty to Provide Information</u>. The permittee shall furnish to the Department, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall furnish to the Director any copies of records required to be kept by this permit.
- G. <u>Signatory Requirements.</u> All Notices of Intent, reports, certifications or information either submitted to the Director, or that this permit requires to be maintained by the permittee, shall be signed and certified in accordance with Rule 12 of the RIPDES regulations. Rhode Island General Laws, Chapter 46-12 provides that any person who knowingly makes any false statements, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of up to \$5,000 per violation, or by imprisonment for not more than thirty (30) days per violation, or by both.

- H. <u>Property Rights.</u> The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State, or local laws or regulations.
- I. <u>Severability.</u> The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.
- J. <u>Transfers.</u> This permit is not transferable to any person except after notice to the Director. The Director may require the operator to apply for and obtain an individual permit, as stated in Part II.R. of this permit.
- K. <u>State Laws.</u> Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law.
- L. <u>Proper Operations and Maintenance.</u> The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operations of backup or auxiliary facilities or similar systems, installed by a permittee only when necessary to achieve compliance with the conditions of the permit.

M. Monitoring and Records

- 1. Samples and measurements taken for the purpose of monitoring shall be representative of the volume and nature of the discharge over the sampling and reporting period.
- 2. The permittee shall retain records of all monitoring including all calibration and maintenance records and all original strip chart recordings from continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least five (5) years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.
- 3. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individual(s) who performed the sampling or measurements;
 - c. The date(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or methods used; and
 - f. The results of such analyses.
- 4. Monitoring must be conducted according to test procedures approved under 40 CFR 136 and applicable Rhode Island regulations, unless other test procedures have been specified in this permit.
- 5. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall upon conviction, be punished by a fine of up to \$10,000 per violation or by imprisonment for not more than six months per violation, or by both. Chapter 46-12 of the Rhode Island General Laws also provides that such acts are subject to a fine of up to \$5,000 per violation, or by imprisonment for not more than thirty (30) days per violation, or by both.
- 6. Monitoring results must be reported on a Discharge Monitoring Report (DMR).
- 7. If the permittee monitors any pollutants more frequently than required by this permit, using test procedures approved under 40 CFR 136, applicable State regulations, or as specified in this

permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.

N. Bypass of Treatment System

- 1. Anticipated Bypass. If the permittee knows in advance of the need for a bypass, he or she shall notify this Department in writing at least ten days prior to the date of the bypass. Such notice shall include the anticipated quantity and the anticipated effect of the bypass.
- 2. Unanticipated Bypass. The permittee shall submit notice of an unanticipated bypass. Any information regarding the unanticipated bypass shall be provided orally within twenty-four hours from the time the permittee became aware of the circumstances. A written submission shall also be provided within five days of the time the permittee became aware of the bypass. The written submission shall contain a description of the bypass and its cause; the period of the bypass, including exact dates and times, and if the bypass has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent reoccurrence of the bypass.

3. Prohibition of Bypass

- a. Bypass is prohibited and enforcement action against the permittee may be taken for the bypass unless:
 - 1. The bypass was unavoidable to prevent loss of life, personal injury or severe property damage;
 - There was no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated waste, or maintenance during normal periods of equipment downtime. This condition is not satisfied if the permittee should, in the exercise of reasonable engineering judgement, have installed adequate backup equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and
 - 3. The permittee submitted notices as required in paragraphs 1 and 2 above.
- b. The Director may approve an anticipated bypass after considering its adverse effects, if the Director determines that it will meet the three conditions of paragraph 3a, above.

O. Upset Conditions

- 1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit limitations if the requirements of paragraph 2 are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- 2. A permittee who wishes to establish an affirmative defense of an upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence, that:
 - a. An upset occurred and the permittee can identify the specific causes(s) of the upset;
 - b. The permitted facility was at the time being properly operated;
 - c. The permittee submitted notice of the upset as required in Rule 14.08 of the RIPDES Regulations; and
 - d. The permittee complied with any remedial measures required under Rule 14.05 of the RIPDES Regulations.
- 3. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.
- P. <u>Inspection and Entry.</u> The permittee shall allow the Director or an authorized representative of DEM, upon presentation of credentials and other documents as may be required by law, to:

- 1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;
- 2. Have access to and copy at reasonable times any records that must be kept under the conditions of this permit;
- 3. Inspect at reasonable times any facilities, equipment, or operations regulated or required under this permit; and
- 4. Sample or monitor any substances or parameters at any location, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA or Rhode Island General Law.
- Q. <u>Permit Actions</u>. This permit may be modified, revoked and reissued, or terminated for cause, including but not limited to: violation of any terms or conditions of this permit; obtaining the permit by misrepresentation or failure to disclose all relevant facts; or a change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not constitute a stay of any permit condition.

R. Requiring an Individual Permit

- 1. The Director may require any owner or operator authorized to discharge under this permit to apply for and obtain an individual permit. Any interested person may petition the Director to take action under this paragraph. The Director may determine at his or her own discretion that an individual permit is required.
- 2. Any owner or operator authorized to discharge by this permit may request to be excluded from coverage of this permit by applying for an individual permit. The owner or operator shall submit an individual application (Form 1 and Form 2D or Form 2C) with reasons supporting the request to the Director. The request may be granted, if the reasons cited by the owner or operator are adequate to support the request. The Director shall notify the permittee within a timely fashion as to whether or not the request has been granted.
- 3. If a permittee requests or is required to obtain coverage under an individual permit, then authorization to discharge under this permit shall automatically be terminated on the date of issuance of the individual permit. Until such time, this permit shall remain fully in force.
- S. <u>Reopener Clause.</u> The Director reserves the right to make appropriate revisions to this permit in order to incorporate any appropriate effluent limitations, schedules of compliance, or other provisions which may be authorized under the CWA or State Law. In accordance with Rule 15 and 23 of the RIPDES Regulations, if any effluent standard or prohibition, or water quality standard is promulgated under the CWA or under State
 - Law which is more stringent than any limitation on the pollutants limited in this permit, or controls pollutants not limited in the permit; then the Director may promptly reopen the permit and modify or revoke and reissue the permit to conform to the applicable standard.
- T. Availability of Reports. Except for data determined to be confidential under Part II.U. below, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the DEM at 235 Promenade Street, Providence Rhode Island. As required by the CWA, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the CWA and under section 46-12-14 of the Rhode Island General Laws.

U. Confidentiality of Information

1. Any information submitted to DEM pursuant to these regulations may be claimed as confidential by the submitter, consistent with Rhode Island General Law 38-2-2. Any such claim must be asserted at the time of the submission in the manner prescribed on the application form or instructions or, in the case of other submissions, by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, DEM may make the information available to the public without further notice.

- 2. Claims of confidentiality for the following information will be denied:
 - a. The name and address of any permit application or permittee;
 - b. Permit applications, permits and any attachments thereto; and
 - c. RIPDES effluent data.
- V. <u>Right to Appeal.</u> Within thirty (30) days of receipt of notice of final authorization, the permittee or any interested person may submit a request to the Director for an adjudicatory hearing to appeal the decision to be covered under the general permit. The request for a hearing must conform to the requirements of Rule 49 of the RIPDES Regulations.